STIC SEARCH

HERTZOG 10/511,878


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=> file reg
FILE 'REGISTRY'
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=> display history full l1-


     FILE 'REGISTRY'
L1       402200 SEA ?BIPHENYL?/CNS
L2       162258 SEA L1 AND X/ELS
L3        27018 SEA L2 AND 2/NRS
L4           41 SEA L3 AND 2/ELC.SUB
L5         2058 SEA L3 AND H/ELS AND 3/ELC.SUB
L6          862 SEA (L4 OR L5) AND 12/C
L7          849 SEA L6 NOT PMS/CI

     FILE 'HCA'
L8         33463 SEA L7 OR PCB OR PCBS OR POLYHALOBIPHENYL? OR POLYCHLOROB
                 IPHENYL? OR POLYFLUOROBIPHENYL? OR POLYBROMOBIPHENYL? OR
                 POLYIODOBIPHENYL? OR (POLYHALO? OR POLYCHLOR? OR
                 POLYBROM? OR POLYIOD?)(2A)BIPHENYL? OR POLY(2A)(HALO? OR
                 FLUOR? OR CHLOR? OR BROM? OR IODI? OR IODO?)(2A)BIPHENYL?
L9           933 SEA AUDIOFREQ? OR AUDIO?(2A)FREQ?
L10       118544 SEA SONIC? OR ULTRASONIC? OR ULTRASOUND? OR ULTRASONO?
                 OR ULTRA(2A)(SOUND? OR SONO?)

     FILE 'REGISTRY'
                 E SODIUM/CN
L11            1 SEA SODIUM/CN
L12          304 SEA (NA(L)(LI OR K))/ELS (L) 2/ELC.SUB

     FILE 'HCA'
L13       213506 SEA L11 OR L12
L14        27172 SEA (MOLTEN? OR MELT? OR FUSE# OR FUSING# OR FUSION? OR
                 LIQ# OR LIQUID? OR LIQUEF? OR LIQUIF? OR FLUID? OR
                 FLUEF? OR FLUIF?)(2A)(SODIUM# OR NA)
L15            4 SEA L8 AND (L9 OR L10) AND (L13 OR L14)

     FILE 'REGISTRY'
L16            1 SEA 92-52-4

     FILE 'HCA'
L17        21853 SEA (L16/D OR L16/DP)(L)(HALO? OR POLYHALO? OR CHLOR? OR
                 POLYCHLOR? OR BROM? OR POLYBROM? OR IODO? OR IODI? OR
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POLYIODO? OR POLYIODI?)
L18 5 SEA L17 AND (L9 OR L10) AND (L13 OR L14)
L19 5 SEA L15 OR L18

=> file hca
FILE 'HCA'

=> d l19 1-5 all hitstr

L19 ANSWER 1 OF 5 HCA COPYRIGHT 2005 ACS on STN
AN 142:182531 HCA
ED Entered STN: 24 Feb 2005
TI Method for reducing toxicity of **PCBs** by using palladium-alumina catalyst and **ultrasonic** waves
IN Lee, Hui Seung; Shin, Jong Heon; Hong, Gi Hun; Noh, Jeong Rae
PA Korea Ocean Research and Development Institute, S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
IC ICM B09B005-00
CC 60-5 (Waste Treatment and Disposal)
Section cross-reference(s): 67
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2003080580	A	20031017	KR 2002-19278	20020409

PRAI KR 2002-19278 20020409
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
KR 2003080580	ICM	B09B005-00

AB The method comprises mixing Na-satd. MeOH soln. with an org. soln. to dissolve **polychlorinated biphenyls** (**PCBs**) in waters; adding Pt-Al2O3 catalyst to the mixed solns.; applying **ultrasonic** waves onto mixed solns. during catalytic dechlorination of **PCBs** to reduce its toxicity by increasing activity of Pt-Al2O3 catalyst under irradn. with

ultrasonic waves, thereby stably conducting chem. reaction in which Cl atoms of the **PCBs** are replaced with H of sodium formate.

ST toxicity **PCB** decompn palladium alumina catalyst **ultrasonic** irradn

IT Sound and **Ultrasound**
(method for reducing toxicity of **PCBs** in waters by using Pt-Al2O3 catalyst and **ultrasonic** irradn.)

IT Water purification
(**ultrasonic**; method for reducing toxicity of **PCBs** in waters by using Pt-Al2O3 catalyst and **ultrasonic** irradn.)

IT 1344-28-1, Aluminum oxide (Al2O3), uses 7440-05-3, Palladium, uses
(method for reducing toxicity of **PCBs** in waters by using Pt-Al2O3 catalyst and **ultrasonic** irradn.)

IT 67-56-1, Methanol, processes 141-53-7 1333-74-0, Hydrogen, processes **7440-23-5**, Sodium, processes
(method for reducing toxicity of **PCBs** in waters by using Pt-Al2O3 catalyst and **ultrasonic** irradn.)

IT **92-52-4D**, 1,1'-Biphenyl, **chloro** derivs.
(method for reducing toxicity of **PCBs** in waters by using Pt-Al2O3 catalyst and **ultrasonic** irradn.)

IT **7440-23-5**, Sodium, processes
(method for reducing toxicity of **PCBs** in waters by using Pt-Al2O3 catalyst and **ultrasonic** irradn.)

RN 7440-23-5 HCA

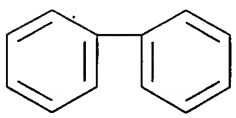
CN Sodium (8CI, 9CI) (CA INDEX NAME)

Na

IT **92-52-4D**, 1,1'-Biphenyl, **chloro** derivs.
(method for reducing toxicity of **PCBs** in waters by using Pt-Al2O3 catalyst and **ultrasonic** irradn.)

RN 92-52-4 HCA

CN 1,1'-Biphenyl (9CI) (CA INDEX NAME)



L19 ANSWER 2 OF 5 HCA COPYRIGHT 2005 ACS on STN

AN 141:427470 HCA

ED Entered STN: 16 Dec 2004

TI Apparatus for treatment of organic chlorine compounds in waste oils

IN Orii, Akihito; Takahashi, Kazuo; Tanaka, Shinji; Mukaide, Masaaki; Honji, Akio
PA Hitachi Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM B01J019-00
ICS C07B035-06
CC 60-5 (Waste Treatment and Disposal)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004337649	A2	20041202	JP 2003-133863	20030513

PRAI JP 2003-133863 20030513

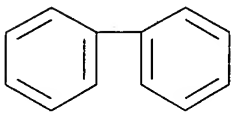
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2004337649	ICM	B01J019-00
	ICS	C07B035-06
JP 2004337649	FTERM	4G075/AA13; 4G075/AA37; 4G075/AA39; 4G075/BA05; 4G075/BB05; 4G075/BB10; 4G075/BD15; 4G075/CA22; 4G075/CA23; 4G075/CA51; 4G075/DA02; 4G075/EB21; 4G075/EC06; 4G075/ED15; 4G075/FA20; 4G075/FB02; 4G075/FB12; 4H006/AA05; 4H006/AC13; 4H006/BA02; 4H006/BA95; 4H006/BB14; 4H006/BE21

AB The app. comprises means for mixing org. Cl compds.-contg. waste oils with .gtoreq.1 H-donor bodies and .gtoreq.1 solvents to give a mixed soln., means for dispersing metal Na grains into mineral oil under inert gas atm., means for contacting the org. Cl compds. with metal Na grains in a microreactor under **ultrasonic** wave irradn. to form NaCl. The microreactor has a 1st flow channel for introduction of metal Na dispersion, a 2nd flow channel for introduction of org. Cl compds. connected to the 1st flow channel, and a 3rd flow channel for discharging the reaction mixt. during dechlorination.

ST org chlorine compd treatment waste oil sodium dispersion
IT Hydrocarbons, processes
(chloro; app. for treatment of org. chlorine compds. in wastes)
IT Wastes
(oil; app. for treatment of org. chlorine compds. in wastes)
IT **92-52-4D**, Biphenyl, **chloro** derivs.
(app. for treatment of org. **chlorine** compds. in waste oils)
IT 7647-14-5P, Sodium chloride, preparation

(metal dispersion; app. for treatment of org. chlorine compds. in wastes)
IT **7440-23-5**, Sodium, reactions
(metal dispersion; app. for treatment of org. chlorine compds. in wastes)
IT **92-52-4D**, Biphenyl, **chloro** derivs.
(app. for treatment of org. **chlorine** compds. in waste oils)
RN 92-52-4 HCA
CN 1,1'-Biphenyl (9CI) (CA INDEX NAME)



IT **7440-23-5**, Sodium, reactions
(metal dispersion; app. for treatment of org. chlorine compds. in wastes)
RN 7440-23-5 HCA
CN Sodium (8CI, 9CI) (CA INDEX NAME)

Na

L19 ANSWER 3 OF 5 HCA COPYRIGHT 2005 ACS on STN
AN 139:341120 HCA
ED Entered STN: 20 Nov 2003
TI **Sonication** treatment of **polychlorinated biphenyl** contaminated media
IN Hunt, Lorrie; Mckinley, Jim; Mcelroy, Rod
PA Sonic Environmental Solutions Inc., Can.
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM B09C001-02
ICS A62D003-00
CC 60-4 (Waste Treatment and Disposal)
Section cross-reference(s): 19
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003090945	A1	20031106	WO 2003-CA593	200304

23

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2482535 AA 20031106 CA 2003-2482535

200304 23

EP 1499459 A1 20050126 EP 2003-747071

200304 23

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003009500 A 20050209 BR 2003-9500

200304 23

PRAI US 2002-374512P P 20020423

WO 2003-CA593 W 20030423

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003090945	ICM	B09C001-02
	ICS	A62D003-00
WO 2003090945	ECLA	A62D003/00G4; A62D003/00M10B; B09C001/02

AB The invention consists of a method for treating **polychlorinated biphenyl** (**PCB**) contaminated media by: a) combining the media with a fluid contg. one or more liq. hydrocarbons to form a media/fluid mixt.; b) **sonicating** the mixt. at **audio frequency** to ext. **PCB** from the media into the fluid; and c) treating the **fluid** with **sodium**-contg. alkali metal. The method may include addnl. steps to reduce the size of the media. Alternatively, the fluid can be decanted from the media after **sonication** and treated sep. with sodium-contg. alkali metal. The present invention provides a method for extn. and low temp. chem. destruction of **PCBs** from media, including solid wastes, such as soils, ballast pitch/tar residues, and scrap from dismantling of **PCB** contaminated elec. equipment.

ST **polychlorinated biphenyl** removal soil oil extn **sonication** sodium redn; solid waste **polychlorinated**

biphenyl kerosene extn **sonication** sodium redn

IT Drying
(air-drying; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT **Sonication**
(at **audio frequency**, for agitation purposes; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Soils
(contaminated, remediation of; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Separation
(decantation, for sepn. of hydrocarbon liq. contg. fluid extractant phase from solids; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Soil reclamation
Solid wastes
Solvent extraction
(extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Hydrocarbon oils
Kerosene
(extractant; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Lime (chemical)
(for neutralizing acidic (sodium-consuming) components before submersion in **molten Na**; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Flotation
(for sepn. of hydrocarbon liq. contg. fluid extractant phase from solids; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Hydrocarbons, processes
(liq.; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Recycling
(of the hydrocarbon fluid; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT Pulverization
Sieving

Size reduction
(of the solids; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT 7647-14-5, Sodium chloride, processes
(extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT **92-52-4D**, 1,1'-Biphenyl, **chloro** derivs.
(extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT 1305-78-8, Calcium oxide, processes
(for neutralizing acidic (sodium-consuming) components before submersion in **molten Na**; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT 497-19-8, Sodium carbonate, processes
(for pH adjustment; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT 37286-64-9, Dowfroth 250
(frothing agent; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

IT **7440-23-5, Sodium**, reactions
(**molten**, as reducing agent; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

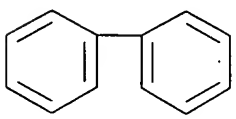
RE

(1) Commonwealth Scientific And Industrial Research Organisation; WO 0222252 A 2002
(2) Everett, L; US 5376182 A 1994 HCA
(3) Getman, G; US 6049021 A 2000 HCA
(4) Grow, H; US 4151067 A 1979 HCA
(5) Mobil Oil; WO 9714765 A 1997 HCA
(6) Nyberg, C; US 4941134 A 1990

IT **92-52-4D**, 1,1'-Biphenyl, **chloro** derivs.
(extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)

RN 92-52-4 HCA

CN 1,1'-Biphenyl (9CI) (CA INDEX NAME)



IT **7440-23-5**, **Sodium**, reactions
(**molten**, as reducing agent; extn., **sonication** and sodium redn. for removal of **polychlorinated biphenyls** from soil and wastes)
RN 7440-23-5 HCA
CN Sodium (8CI, 9CI) (CA INDEX NAME)

Na

L19 ANSWER 4 OF 5 HCA COPYRIGHT 2005 ACS on STN
AN 136:188689 HCA
ED Entered STN: 14 Mar 2002
TI System for removal of **PCB** and dioxins from bottom sediments at standard temperature
IN Nishikawa, Kazuhiko; Maeda, Yasuaki
PA Microaqua Y. K., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C02F011-00
ICS C02F001-30; C02F001-36
CC 60-4 (Waste Treatment and Disposal)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002059196	A2	20020226	JP 2000-297597	200008 23

PRAI JP 2000-297597 20000823
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002059196	ICM	C02F011-00
	ICS	C02F001-30; C02F001-36

AB Bottom sediments are treated by synergistic effect of **ultrasonic** wave, electromagnetic field, and metal ion catalysts for redn. of sediment vol. and for removal of **PCB** and dioxins. The system is suitable for treatment of bottom sediment, landfill leachate, etc.
ST **PCB** dioxin removal bottom sediment **ultrasonic** wave; landfill leachate **PCB** dioxin removal; electromagnetic field application bottom sediment detoxification; metal catalyst pollutant removal bottom sediment
IT Decomposition

(acoustic; decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

IT Sludges
(bottom; decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

IT Decomposition
(catalytic; decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

IT Electromagnetic field
Environmental pollution control
Landfill leachate
(decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

IT Wastes
(transformer oil; decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

IT Transformer oils
(waste; decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

IT 7439-95-4, Magnesium, uses 7440-09-7, Potassium, uses **7440-23-5**, Sodium, uses
(decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

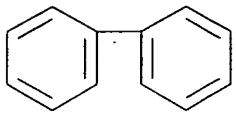
IT 79-01-6, Trichloroethylene, processes **92-52-4D**, 1,1'-Biphenyl, **chloro** derivs. 132-64-9D, Dibenzofuran, halo derivs. 262-12-4D, Dibenzo[b,e][1,4]dioxin, halo derivs. 1746-01-6
(decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

IT **7440-23-5**, Sodium, uses
(decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)

RN 7440-23-5 HCA
CN Sodium (8CI, 9CI) (CA INDEX NAME)

Na

IT **92-52-4D**, 1,1'-Biphenyl, **chloro** derivs.
(decompn. of **PCB** and dioxins in bottom sediments by synergistic treatment by application of **ultrasonic** wave and electromagnetic field in presence of metal catalysts)
RN 92-52-4 HCA
CN 1,1'-Biphenyl (9CI) (CA INDEX NAME)



L19 ANSWER 5 OF 5 HCA COPYRIGHT 2005 ACS on STN
AN 135:170262 HCA
ED Entered STN: 06 Sep 2001
TI Method for decontamination of **PCB**-polluted soil and decomposition of the **PCB** molecule without forming dioxins or furans
IN Guibert, Yves; Gilbert, Roger; Ceresoli, Georges
PA Fr.
SO Fr. Demande, 9 pp.
CODEN: FRXXBL
DT Patent
LA French
IC ICM A62D003-00
CC 60-4 (Waste Treatment and Disposal)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2801800	A1	20010608	FR 1999-15378	19991207
	FR 2801800	B1	20030926		
PRAI	FR 1999-15378		19991207		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
FR 2801800	ICM	A62D003-00
FR 2801800	ECLA	A62D003/00E5; C10G007/00P

AB The soil is treated at .gtoreq.1200.degree. under an inert atm. to prevent formation of dioxins or furans; the chlorine gas formed is neutralized with salts of sodium, potassium, and/or calcium. To

improve **PCB** removal, the compds. are treated with **ultrasonic** waves to obtain a uniformly small size.

ST **polychlorinated biphenyl** removal contaminated soil

IT Soils
(contaminated; method for decontamination of **PCB** -polluted soil and decompn. of the **PCB** mol. without forming dioxins or furans)

IT Controlled atmospheres
(method for decontamination of **PCB**-polluted soil and decompn. of the **PCB** mol. without forming dioxins or furans)

IT 7440-09-7D, Potassium, salts, uses **7440-23-5D**, Sodium, salts, uses 7440-70-2D, Calcium, salts, uses
(method for decontamination of **PCB**-polluted soil and decompn. of the **PCB** mol. without forming dioxins or furans)

IT **92-52-4D**, Biphenyl, **chloro** derivs. 132-64-9D, Dibenzofuran, chloro derivs. 262-12-4D, Dibenzo-p-dioxin, chloro derivs.
(method for decontamination of **PCB**-polluted soil and decompn. of the **PCB** mol. without forming dioxins or furans)

IT **7440-23-5D**, Sodium, salts, uses
(method for decontamination of **PCB**-polluted soil and decompn. of the **PCB** mol. without forming dioxins or furans)

RN 7440-23-5 HCA

CN Sodium (8CI, 9CI) (CA INDEX NAME)

Na

IT **92-52-4D**, Biphenyl, **chloro** derivs.
(method for decontamination of **PCB**-polluted soil and decompn. of the **PCB** mol. without forming dioxins or furans)

RN 92-52-4 HCA

CN 1,1'-Biphenyl (9CI) (CA INDEX NAME)